

CLAIMS

1. A component mounting sequence optimizing method
in component mounting with use of a component holding head
5 (112) having a plurality of component holding members (111)
and a component image pickup section (116) for capturing
images of components (21) held by the component holding
members,

the method comprising:

10 comparing conveyance times required for
conveyances of components held by the component holding
members to respective mounting positions with recognition
times required for recognitions of the components held by
the component holding members with the component image
15 pickup section by using the a control device (300); and

determining a mounting sequence for the
components held by the component holding head by the
control device on basis of a result of the comparison.

2. The component mounting sequence optimizing method
20 as claimed in claim 1, further comprising: in the comparing
operation, determining mounting preparation times (T) that
are the longer ones in the conveyance times and the
recognition times for the components; and determining a
component having the shortest one in the mounting
25 preparation times as a component that is to be subsequently

mounted.

3. The component mounting sequence optimizing method as claimed in claim 1 or 2, further comprising: before the comparing operation, determining mounting conditions
5 required for mounting of the components by the control device.

4. A component mounting device comprising:
a component holding head (112) having a plurality of component holding members (111);

10 a component image pickup section (116) configured to capture images of components (21) held by the component holding members, wherein the components are held and mounted by the component holding head;

a control device (300) configured to make
15 comparison between conveyance times required for conveyances of the components held by the component holding members to respective mounting positions and recognition times required for recognitions of the components held by the component holding members with the component image
20 pickup section and to determine a mounting sequence for the components held by the component holding head on basis of a result of the comparison.

5. The component mounting device as claimed in claim 4, wherein in the comparison operation, the control device
25 determines mounting preparation times (T) that are the

longer ones in the conveyance times and the recognition times for the components, and determines a component having the shortest one in the mounting preparation times as a component that is to be subsequently mounted.

5 6. The component mounting device as claimed in claim 4 or 5, wherein the control device further determines mounting conditions required for mounting of the components.

7. A program for making a computer execute a component mounting sequence optimizing method in component mounting with use of a component holding head (112) having a plurality of component holding members (111) and a component image pickup section (116) for capturing images of components (21) held by the component holding members,
10 the program comprising:

15 a procedure of making comparison between conveyance times required for conveyances of the components held by the component holding members to respective mounting positions and recognition times required for recognitions of the components held by the component holding members with the component image pickup section;
20 and

 a procedure of determining a mounting sequence for the components held by the component holding head on basis of a result of the comparison.

25 8. The program as claimed in claim 7, further

comprising: in the comparison procedure, a procedure of determining mounting preparation times (T) that are the longer ones in the conveyance times and the recognition times for the components; and a procedure of determining a component having the shortest one in the determined mounting preparation times as a component that is to be subsequently mounted.

9. The program as claimed in claim 7 or 8, further comprising, before the comparison procedure, a procedure of determining mounting conditions required for mounting of the components.

10. A recording medium which can be read by computers and in which a program is recorded for making a computer execute a component mounting sequence optimizing method in component mounting with use of a component holding head (112) having a plurality of component holding members (111) and a component image pickup section (116) for capturing images of components (21) held by the component holding members,

the recording medium which has the program comprising:

a procedure of making comparison between conveyance times required for conveyances of the components held by the component holding members to respective mounting positions and recognition times required for

recognitions of the components held by the component holding members with the component image pickup section; and

5 a procedure of determining a mounting sequence for the components held by the component holding head on basis of a result of the comparison.

11. The recording medium as claimed in claim 10, the program further comprising: in the comparison procedure, a procedure of determining mounting preparation times (T)
10 that are the longer ones in the conveyance times and the recognition times for the components; and a procedure of determining a component having the shortest one in the determined mounting preparation times as a component that is to be subsequently mounted.

15 12. The recording medium as claimed in claim 10 or 11, the program further comprising, before the comparison procedure, a procedure of determining mounting conditions required for mounting of the components.